

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/551,511 Confirmation No.: 6093  
Applicant : Malcolm R. Bell et al.  
Filing Date : October 3, 2006  
Title : COIN ACCEPTOR  
Group Art Unit : 3653  
Examiner : Mark J. Beauchaine  
Docket No. : 20305-4006  
Customer No. : 34313

Attention: Office of Petitions  
Commissioner for Patents  
EFS Web

**PETITION TO WITHDRAW HOLDING OF ABANDONMENT**  
**37 CFR 1.181 (a)**

Sir:

The above-identified application became abandoned for the alleged failure of the USPTO to receive a timely and proper reply to a notice or action by the United States Patent and Trademark Office.

Applicant became aware of the Abandonment upon receipt of the Notice of Abandonment mailed March 9, 2009

APPLICANT HEREBY PETITIONS TO WITHDRAW HOLDING OF ABANDONMENT

1. REPLY AND/OR FEE

- A. ☒ The reply and/or fee to the above-noted Office action in the form of a Response to Office Action (identify type of reply) is enclosed herewith.
- B. The issue fee of \$ \_\_\_\_\_
- ☐ has been paid previously on \_\_\_\_\_
- ☐ is enclosed herewith.

Applicant : Malcolm Bell et al.  
Appl. No. : 10/551,511  
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Docket No. : 20305-4006

2. AUTHORIZATION TO CHARGE ANY FEE DEFICIENCY

☒ The Commissioner is hereby authorized to charge any necessary fees to Account No. 15-0665.

3. STATEMENT (37 CFR 1.8(b)(3))

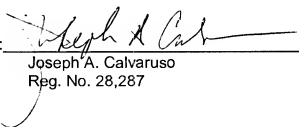
I hereby attest to personal knowledge that the Response was addressed to the USPTO as set out in 37 CFR 1.1(a) and deposited along with a Certified Copy of the Foreign Priority Application with the U.S. Postal Service with sufficient postage as first class mail on October 23, 2008. The correspondence included a certificate of mailing, stating the date of the deposit, pursuant to 37 CFR 1.8(a). Enclosed is a copy of the certificate of mailing along with a copy of the Response as mailed on October 23, 2008 in response to the July 23, 2008 Office Action. A copy of the return receipt postcard bearing the United States Patent Office's stamp indicating the receipt date of October 27, 2008 is attached hereto.

The attached PAIR record shows that the Certified Copy of the Foreign Priority Application was received on October 27, 2008. When the PAIR item is downloaded, the subject "missing" Response appears along with the priority application. In view of these circumstances, Applicant respectfully requests withdrawal of the Notice Of Abandonment and consideration of its submitted response.

Respectfully submitted,

ORRICK, HERRINGTON & SUTCLIFFE LLP

Dated: April 1, 2009

By:   
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10/551,511 Coin acceptor

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**This application is officially maintained in electronic form. To View: Click the desired Document Description. To Download and Print: Check the desired document(s) and click PDF.**

**Bibliographic Data**

Mail Room Date	Document Code	Document Description	Document Category	Page Count
03-09-2009	ABN	<b>Abandonment</b>	<b>PROSECUTION</b>	<b>2</b>
10-27-2008	FRPR	Certified Copy of Foreign Priority Application	PROSECUTION	39
07-23-2008	CTNF	Non-Final Rejection	PROSECUTION	7
07-23-2008	892	List of references cited by examiner	PRIOR ART	1
07-23-2008	SRNT	Examiner's search strategy and results	PROSECUTION	1
07-23-2008	SRNT	Examiner's search strategy and results	PROSECUTION	1
07-23-2008	1449	List of References cited by applicant and considered by examiner	PRIOR ART	2
07-23-2008	SRNT	Examiner's search strategy and results	PROSECUTION	1
07-23-2008	SRNT	Examiner's search strategy and results	PROSECUTION	1
07-23-2008	CTNF	Non-Final Rejection	PROSECUTION	1
04-25-2008	A...	Amendment/Req. Reconsideration-After Non-Final Reject	PROSECUTION	1
04-25-2008	CLM	Claims	PROSECUTION	3
04-25-2008	REM	Applicant Arguments/Remarks Made in an Amendment	PROSECUTION	1
04-25-2008	N417	EFS Acknowledgment Receipt	PROSECUTION	2
04-25-2008	WFEE	Fee Worksheet (PTO-06)	PROSECUTION	1
04-21-2008	N570	Communication - Re: Power of Attorney (PTOL-308)	PROSECUTION	1
04-21-2008	N570	Communication - Re: Power of Attorney (PTOL-308)	PROSECUTION	1
04-03-2008	LET.	Miscellaneous Incoming Letter	PROSECUTION	1
04-03-2008	C.AD	Change of Address	PROSECUTION	2
04-03-2008	R3.73B	Assignee showing of ownership per 37 CFR 3.73(b).	PROSECUTION	1
04-03-2008	N417	EFS Acknowledgment Receipt	PROSECUTION	2
04-03-2008	PA..	Power of Attorney	PROSECUTION	1
03-28-2008	NTC.A.NONCPL	Notice to the applicant regarding a non-compliant or non-responsive amendment	PROSECUTION	4
03-28-2008	CTMS	Miscellaneous Action with SSP	PROSECUTION	1
01-14-2008	IDS.LET	Information Disclosure Statement Letter	PROSECUTION	3
01-14-2008	IDS	Information Disclosure Statement (IDS) Filed (SB/08)	PROSECUTION	2
01-14-2008	N417	EFS Acknowledgment Receipt	PROSECUTION	2
01-14-2008	WFEE	Fee Worksheet (PTO-06)	PROSECUTION	1
01-04-2008	A...	Amendment/Req. Reconsideration-After Non-Final Reject	PROSECUTION	1
01-04-2008	CLM	Claims	PROSECUTION	3
01-04-2008	REM	Applicant Arguments/Remarks Made in an Amendment	PROSECUTION	5
01-04-2008	N417	EFS Acknowledgment Receipt	PROSECUTION	2
10-04-2007	CTNF	Non-Final Rejection	PROSECUTION	6
10-04-2007	1449	List of References cited by applicant and considered by examiner	PRIOR ART	2

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): Malcolm Reginald Bell et al.

Serial No.: 10/551,511

Group Art Unit: 3653

Filed: October 3, 2006

Examiner: Mark J. Beauchaine

For: COIN ACCEPTOR

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**CERTIFICATE OF MAILING (37 C.F.R. §1.8(A))**

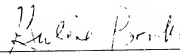
Sir:

I hereby certify that the attached:

1. Response to Office Action (11 pages)
2. Certified Priority document – Great Britain Patent Application  
No. GB0307880.5
3. Return receipt postcard

along with any paper(s) referred to as being attached or enclosed and this Certificate of Mailing are being deposited with the United States Postal Service on date shown below with sufficient postage as first-class mail in an envelope addressed to the: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Respectfully submitted,  
**ORRICK, HERRINGTON & SUTCLIFFE LLP**

By:   
Grlene Banks

Dated: October 23, 2008

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Docket No. 020305-004006

In re U.S. Patent Application No. 10/551,511

Filed: October 3, 2006

Inventor(s): Malcolm R. Bell et al.

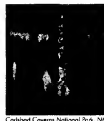
FOR: COIN ACCEPTOR



Enclosed:

1. Certificate of Mailing
2. Response to Office Action (11 pages)
3. Certified Priority document – Great Britain Patent Application Serial GB0307880.5
4. Return post card

VIA FIRST CLASS MAIL ON OCTOBER 23, 2008



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PATENT APPLICATION  
Attorney Docket No.: 020305-004006  
(formerly 17178.006)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Malcolm Reginald Hallas Bell, et al.  
Serial No.: 10/551,511  
Filed: October 3, 2006  
For: COIN ACCEPTOR  
Examiner: Mark J. Beauchaine                      Group Art Unit: 3653

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**RESPONSE TO OFFICE ACTION**

**VIA FIRST CLASS MAIL**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Applicants submit herewith a response to the Office Action dated July 23, 2008. This response is timely filed on October 23, 2008. Applicants respectfully request reconsideration of the instant application, in view of the following amendments and remarks.

Amendments to the claims are included in the claim listing beginning on page 2 of this paper.

Remarks begin on page 5 of this paper.

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims**

1. (previously presented) A coin acceptor comprising:  
a coin sensing station,  
a coin rundown path extending through the sensing station,  
the coin rundown path including a coin guiding surface on which a major face of the coin lies in sliding engagement during its passage along the path through the coin sensing station, wherein the path is curved such that the face of the coin is urged by centripetal force against the coin guiding surface as it moves along the path and through the coin sensing station.
2. (cancelled)
3. (previously presented) A coin acceptor according to claim 1 further comprising:  
a body including the coin guiding surface, and a cover mounted on the body, wherein the coin rundown path extends between said surface and the cover.
4. (original) A coin acceptor according to claim 3 wherein the cover is fixedly mounted on the body, without a coin jam release mechanism.
5. (previously presented) A coin acceptor according to claim 1 further comprising:  
a coin inlet opening and a curved inlet surface for guiding a coin inserted in the coin inlet to a particular region of the coin guiding surface.

6. (previously presented) A coin acceptor according to claim 1 wherein the coin guiding surface is configured to relieve a pressure differential between the major face of the coin and the coin guiding surface.

7. (previously presented) A coin acceptor according to claim 1 wherein the coin rundown path extends through sensor coils at the coin sensing station, and one of said sensor coils comprises an elongate winding extending longitudinally along the coin rundown path.

8. (previously presented) A coin acceptor according to claim 7 wherein said one of the coils is wound on an elongate former which is longer than it is wide.

9. (previously presented) A coin acceptor according to claim 8 wherein said one of the coils is longer than the maximum diameter of coins to be accepted thereby.

10. (previously presented) A coin acceptor according to claim 7 including at least one coil of circular cross section at the sensing station.

11. (original) A coin acceptor according to claim 10 wherein the circular coil has a diameter smaller than the minimum diameter of coins to be accepted thereby.

12. (previously presented) A coin acceptor according to claim 7 further comprising: processing circuitry coupled to the elongate coil to derive therefrom a coin parameter signal as a function of coin diameter.

13. (previously presented) A coin acceptor comprising:

a coin sensing station,

a coin rundown path extending through the coin sensing station.

the coin rundown path including a curved coin guiding surface on which a major face of the coin is urged by centripetal force to lie in sliding engagement during its passage along the coin rundown path through the coin sensing station, and

a side wall opposite to the curved coin guiding surface, said coin rundown path extending between the coin guiding surface and the sidewall, wherein said side wall is fixedly mounted relative to the curved coin guiding surface.

14. (previously presented) A coin acceptor comprising:

a coin sensing station,

a coin rundown path extending through the coin sensing station,

the coin rundown path including a curved coin guiding surface on which a major face of the coin lies in sliding engagement during its passage along the coin rundown path through the coin sensing station, and

means to relieve a pressure differential between the major face of the coin and the curved coin guiding surface to inhibit coins sticking to the curved coin guiding surface.

15. (original) A coin acceptor according to claim 14 including pressure relief holes through the coin guiding surface.

**REMARKS**

The Office Action dated July 23, 2008 has been carefully considered. Claims 1 and 3-15 are currently pending. Reconsideration and allowance of the present application in view of the following Remarks are respectfully requested.

In the Office Action dated July 23, 2008, the Examiner:

- Rejected claims 1, 3-6 and 13 under 35 U.S.C. § 103(a), as being unpatentable over U.S. Patent Application Publication No. US 2003/0150687 to King in view of U.S. Patent No. 5,480,348 to Mazur.
- Rejected claims 7-12 under 35 U.S.C. 103(a) as being unpatentable over King in view of Mazur and further in view of U.S. Patent No. 4,989,714 to Abe.
- Rejected claims 14 and 15 under 35 U.S.C. 103(a) as being unpatentable over King in view of Mazur and further in view of U.S. Patent No. 6,109,417 to Kovens *et al.*

35 U.S.C. § 103(a)

**Independent Claim 1**

Independent claim 1 was rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent Application Publication No. US 2003/0150687 to King in view of U.S. Patent No. 5,480,348 to Mazur. Claim 1 discloses a coin acceptor comprising: a coin sensing station, a coin rundown path extending through the sensing station, the coin rundown path including a coin guiding surface on which a major face of the coin lies in sliding engagement during its passage along the path through the coin sensing station, wherein the path is curved such that the face of

the coin is urged by centripetal force against the coin guiding surface as it moves along the path and through the coin sensing station.

The Examiner concedes that King does not disclose a curved rundown path; but asserts that Mazur teaches coin rundown path 410 that has a curved guiding surface on which a major face of a coin slides and is urged by centripetal force as it passes sensing station 411/412, and a side wall opposite said curved guiding surface (see Figure 54) for the purpose of directing coins being processed within said acceptor. Applicants respectfully traverse the rejection and submit that the invention is patentable over King in view of Mazur because Mazur also fails to disclose, teach or suggest a curved rundown path.

In the amendment filed on January 4, 2008, claim 1 was amended to specify that: "the path is curved such that the face of the coin is urged by centripetal force against the coin guiding surface as it moves along the path and through the coin sensing station." The invention addresses the problem of coin wobble that can occur in the prior art as a coin passes through the sensing station. Coin wobble can degrade the sensor output. According to the invention, the face of the coin is held by centripetal force against the curved coin guiding surface as it passes through the coin sensing station and in this way, coin wobble is prevented.

The Examiner considers that the exit chute 410 of Mazur as equivalent to the rundown path claimed. However, Applicants respectfully submit that exit chute 410 does not provide a curved path such that the face of the coin is urged by centripetal force against the coin guiding surface as the coin moves along the path and through the coin sensing station. As shown in

Mazur Figure 54a, coin under test is ejected from a rotary disc into the exit chute 410 in a horizontal manner in a straight line not along a curve. The coin then passes horizontally along the straight portion of exit chute 410 through the second sensor ("coin sensing station"), formed by a light source 411 and a photodetector 412. Thereafter, the coin engages with curved portion of exit chute 410 and at that point is urged by centripetal force so as to turn through 90° downward to a collection point, similarly to one shown in Mazur Fig. 18. The curvature in exit chute 410 only guides the coin after the coin has already passed the coin sensing station, but does not guide the coin through the coin sensing station as claimed in claim 1. Thus, Mazur does not teach a curved rundown path urging the face of a coin by centripetal force against the coin guiding surface as the coin moves through the coin sensing station. Instead, Mazur teaches ejecting coins in free flight horizontally to be sensed by the sensing station 411, 412 and thereafter using the curved surface of the exit chute 410 to re-direct the coins downwardly toward the collection point. Therefore, the coins ejected by Mazur when in free flight almost certainly will wobble, which will degrade the action of the sensor 411, 412, particularly if an inductive sensor were used, as in King. Even if the coins do not wobble, it would be due to size of the opening of the exit chute, rather than the curved path and the centripetal force applied.

Therefore, it is respectfully submitted that Mazur and King combined do not disclose, teach or suggest a coin rundown path including a curved coin guiding surface on which a major face of the coin is urged by centripetal force to lie in sliding engagement during its passage along

the coin rundown path through the coin sensing station. Accordingly, Applicants respectfully request that the rejection of independent claim 1 based King and Mazur be withdrawn.

Moreover, as claims 3-12 all depend from independent claim 1, Applicants respectfully submit that these claims are equally allowable. Withdrawal of these rejections and allowance of claims 3-12 are also respectfully requested.

### **Independent claim 13**

Claim 13 is directed to a coin acceptor comprising: a coin sensing station, a coin rundown path extending through the coin sensing station, the coin rundown path including a curved coin guiding surface on which a major face of the coin is urged by centripetal force to lie in sliding engagement during its passage along the coin rundown path through the coin sensing station, and a side wall opposite to the curved coin guiding surface, said coin rundown path extending between the coin guiding surface and the sidewall, wherein said side wall is fixedly mounted relative to the curved coin guiding surface.

Similar to the argument presented above, the combination of King and Mazur do not render claim 13 obvious and unpatentable. Although Mazur teaches an exit chute 410 that may be curved after the coins have already pass through the coin sensing station, exit chute 410 does not include a curved coin guiding surface on which a major face of the coin is urged by centripetal force to lie in sliding engagement during its passage along the coin rundown path through the coin sensing station. As shown in Fig. 54, the path for the coins in the exit chute 410 appears to be straight and flat, with a slot sized to receive the coins. Nothing in the drawing or

the specification of Mazur teaches or suggests having an exit chute with a curved guiding surface along the coin traveling path through the coin sensing station. Nothing in King and Mazur combined discloses, teaches or suggests that exit chute 410 having a curved guiding surface that guides the coin through the coin sensing station. Reconsideration and withdrawal of rejection of independent claim 13 based on King and Mazur are thereby respectfully requested.

**Dependent claims 7-12**

The Examiner rejected claims 7-12 under 35 U.S.C. § 103(a) as being unpatentable over King in view of Mazur and Abe (U.S. Patent No. 4,989,714). Applicants respectfully traverse the rejection because King and Mazur do not disclose, teach or suggest a coin rundown path including a coin guiding surface on which a major face of the coin lies in sliding engagement during its passage along the path through the coin sensing station, wherein the path is curved such that the face of the coin is urged by centripetal force against the coin guiding surface as it moves along the path and through the coin sensing station. Abe does not overcome the shortcomings of King and Mazur. Therefore, King, Mazur and Abe combined do not render claims 7-12 obvious because they fail to disclose, teach or suggest all the claimed elements of the base claim, claim 1.

**Independent claim 14**

Independent claim 14 was rejected under 35 U.S.C. § 103(a) as being obvious over U.S. King in view of Mazur and in view of Kovens (U.S. Patent No. 6,109,417). Claim 14 is directed to a coin acceptor comprising: a coin sensing station, a coin rundown path extending through the

coin sensing station, the coin rundown path including a curved coin guiding surface on which a major face of the coin lies in sliding engagement during its passage along the coin rundown path through the coin sensing station, and means to relieve a pressure differential between the major face of the coin and the curved coin guiding surface to inhibit coins sticking to the curved coin guiding surface.

First, as presented above, Applicants respectfully submit that Mazur's exit chute 410 does not include a curved coin guiding surface on which a major face of the coin lines in sliding engagement during its passage along the coin rundown path through the coin sensing system.

Second, Applicants respectfully submit that exit chute 410 does not have a curved guiding surface 410 configured to relieve a pressure differential between the major coin face and the guiding surface. There is no teaching, disclosure or suggestion that the exit chute 410 contains holes or other means to relieve the pressure differential that may occur between the coin and the surface. Kovens does not cure this deficiency. Although Kovens discloses apertures 44, these apertures are in the floor 18 of the coin race 12 and the floor 36 of the coin race insert 30. As stated in Kovens specification, "[a]pertures 44 serve to prevent salting by draining liquid that may find its way into the coin entrance 24 before the liquid reaches the electronic components of the coin acceptance assembly." Kovens Col. 4, lines 38-42. This language makes clear that the apertures in Kovens are for discharging liquids and have no purpose in relieving a pressure differential between a curved guiding surface and a major surface of the coin. The only pressure relief is for the discharger of the liquid. Applicants respectfully submit that a person ordinary

skilled in the art would not find holes for draining liquids as teaching or suggesting that holes can be used for relieving a pressure differential in the specific configuration of a curved coin guiding surface used for guiding the major surface of a coin through a sensing station.

**CONCLUSION**

Based on the foregoing amendments and remarks, Applicants respectfully request reconsideration and withdrawal of the rejection of claims and allowance of this application.

We also enclosed herewith the certified copy of Great Britain Patent Application No. GB0307880.5 from which this application claims priority.

The Commission is hereby authorized to charge any additional fees which may be required for this response, or credit any overpayment to Deposit Account No. 15-0665, Order No. 020305-004006.

Respectfully submitted,  
ORRICK, HERRINGTON & SUTCLIFFE LLP

Dated: October 23, 2008

By: 

Rita H. Lin  
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